



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re U.S. Patent Application of )  
SATO et al. ) Art Unit 2823  
Application Number: 10/622,651 ) Examiner  
Filed: July 21, 2003 ) Coleman, William D.  
For: SEMICONDUCTOR NANOPARTICLES, METHOD FOR )  
PRODUCING THE SAME, AND FLUORESCENCE )  
REAGENT COMPRISING SEMICONDUCTOR )  
NANOPARTICLES )  
Attorney Docket No. HIRA.0117 )

Honorable Assistant Commissioner  
for Patents  
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97, this Information Disclosure Statement is submitted in the above-identified patent application. A listing of documents to be published on the face of any patent granted from this application is submitted herewith on Form PTO-1449. Any other documents or information submitted for consideration by the Examiner are listed in this paper. A copy of each U.S. and foreign patent, or each publication or portion thereof listed or herein identified, is submitted herewith.

06/09/2005 SDENB081 00000021 10622651

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**CERTIFICATION**

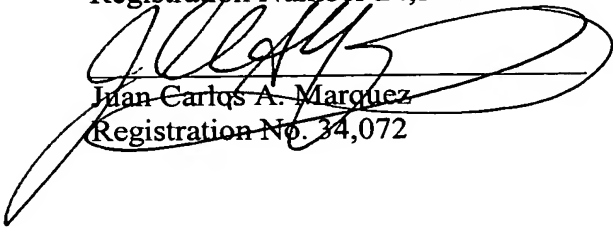
This Information Disclosure Statement is submitted after three months from the filing date of the above-identified U.S. patent application and after the mailing date of the first Office Action on the merits of the above-identified application, but prior to issuance of the earlier of any Final Action or Notice of Allowance sent in such application. Accordingly, the required fee is attached.

The Examiner is requested to acknowledge consideration of the information provided in this paper in accordance with prescribed procedures.

Please charge any additional fees or credit any overpayments in connection with this paper to Deposit Account No. 08-1480.

Respectfully submitted,

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Form PTO 1449  U.S. Department of Commerce Patent and Trademark Office  Information Disclosure Statement by Applicant	ATTY. DOCKET NUMBER HIRA.0117		SERIAL NUMBER 10/622,651
	APPLICANT SATO et al		
	FILING DATE July 21, 2003		GROUP

## U.S. Patent Documents

Examiner Initial	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE

## Foreign Patent Documents

Examiner Initial	DOCUMENT NUMBER	FILING DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
						YES	NO

## Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

		Yongchi Tian et al., "Coupled Composite CdS-CdSe and Core-Shell Types of (CdS)CdSe and (CdSe)CdS Nanoparticles", J. Phys. Chem. 1996, Vol. 100, No. 21, 1996 American Chemical Society, pp. 8927-8939
		Hyeong-Chan Youn et al., "Dihexadecyl Phosphate, Vesicle-Stabilized and in Situ Generated Mixed CdS and ZnS Semiconductor Particles, Preparation and Utilization for Photosensitized Charge Separation and Hydrogen Generation", J. Phys. Chem. 1988, Vol. 92, No. 22, 1988 American Chemical Society, pp. 6320-6327
		A. R. Kortan et al., "Nucleation and Growth of CdSe on ZnS Quantum Crystallite Seeds, and Vice Versa, in Inverse Micelle Media", J. Phys. Chem. 1990, Vol. 112, No. 4, 1990 American Chemical Society, pp. 1327-1332
		B. O. Dabbousi et al., (CdSe) ZnS Core-Shell Quantum Dots: Synthesis and Characterization of a Size Series of Highly Luminescent Nanocrystallites", J. Phys. Chem. 1997, Vol. 101, No. 46, 1997 American Chemical Society, pp. 9463-9475
		Lubomir Spanhel et al., "Photochemistry of Colloidal Semiconductors, 20. Surface Modification and Stability of Strong Luminescing CdS Particles" J. Phys. Chem. 1987, Vol. 109, No. 19, 1987 American Chemical Society, pp. 5649-5655
		A.P. Alivisatos, "Perspectives on the Physical Chemistry of Semiconductor Nanocrystals", J. Phys. Chem. 1996, Vol. 100, No. 31, 1996 American Chemical Society, pp. 13226-13239
		Hedi Mattoussi et al., "Self-Assembly of CdSe-ZnS Quantum Dot Bioconjugates Using an Engineered Recombinant Protein", J. Phys. Chem. 2000, Vol. 122, No. 49, 2000 American Chemical Society, pp. 12142-12150